

3C SKD SKD/KKS BC/RVD/JH SI/DA LJK/WT

July 24, 2007

The Honorable Chairman and Members of the Hawaii Public Utilities Commission 465 South King Street Kekuanaoa Building, 1<sup>st</sup> Floor Honolulu, Hawaii 96813

PUBLIC UTILITIES

Dear Commissioners:

Subject: Docket No. 2006-0386

HECO 2007 Test Year Rate Case – June 2007 Updates – Set #4

Enclosed is the fourth set of updates to Hawaiian Electric Company, Inc.'s ("HECO") 2007 test year estimates reflected in the Application, Direct Testimonies, Exhibits and Workpapers filed with the Commission on December 22, 2006. This set includes updates to the following:

• HECO T-23 – William A. Bonnet

Very truly yours,

Dean K. Matsuura

Director, Regulatory Affairs

Enclosure

cc: Division of Consumer Advocacy
Sawvel & Associates, Inc.
Utilitech, Inc.
Dr. Khojasteh Davoodi
Ralph Smith, Larkin & Associates
Randall Y.K. Young, Esq. (w/o enclosure)

JUNE 2007 UPDATE DOCKET NO. 2006-0386 HECO T-23 PAGE 1 OF 29 (Submitted 7/24/07)

JUNE 2007 UPDATE

#### Ref: W. Bonnet, HECO T-23, Results of Operations, Revenue Requirements

This update incorporates the adjustments submitted by HECO's witnesses in their June 2007 Updates and responses to information requests submitted by the Consumer Advocate and the Department of Defense ("DOD") and provides revised Results of Operations at current effective rates (HECO-2301) and present rates (HECO-2302). This update also provides the supporting documents for the revised HECO-2301 and HECO-2302.

As explained by HECO's witnesses, the adjustments incorporate certain 2006 recorded amounts, correct errors and refine test year estimates in light of new information not available at the time the Company developed its direct testimonies. HECO has also tried to be responsive to issues raised by the Consumer Advocate and the DOD in their information requests and has made adjustments where appropriate.

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Hawaiian Electric Company, Inc.
Update at Current Effective Rates
Results of Operations

HECO-2301 DOCKET NO. 2006-0386 PAGE 1 OF 1

#### (\$ Thousands)

	Current Effective Rates	Additional Amount	8.92% Return on Average Rate Base
Electric Sales Revenue	1,404,092	96,553	1,500,645
Other Operating Revenue	3,378	767	4,145
Gain on Sale of Land	500		500
TOTAL OPERATING REVENUES	1,407,970	97,320	1,505,290
Fuel	543,874		543,874
Purchased Power	386,872		386,872
Production	70,077		70,077
Transmission	10,378		10,378
Distribution	24,948		24,948
Customer Accounts	11,929		11,929
Allowance for Uncoll. Accounts	1,417	97	1,514
Customer Service	7,270		7,270
Administration & General	75,786		75,786
Gen Excise Tax Rate Incr Adj	328		328
Operation and Maintenance	1,132,879	97	1,132,976
Depreciation & Amortization	78,763		78,763
Amortization of State ITC	(1,304)		(1,304)
Taxes Other Than Income	131,209	8,619	139,828
Interest on Customer Deposits	377		377
Income Taxes	13,026	34,475	47,501
TOTAL OPERATING EXPENSES	1,354,950	43,191	1,398,141
OPERATING INCOME	53,020	54,129	107,149
AVERAGE RATE BASE	1,202,180	(968)	1,201,212
RATE OF RETURN ON AVERAGE RATE BASE	4.41%		8.92%

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Hawaiian Electric Company, Inc.
Update

Results of Operations

HECO-2302 DOCKET NO. 2006-0386 PAGE 1 OF 1

(\$ Thousands)

	Present Rates	Additional Amount	Return on Average Rate Base
Electric Sales Revenue	1,348,635	152,004	1,500,639
Other Operating Revenue	3,329	820	4,149
Gain on Sale of Land	500		500
TOTAL OPERATING REVENUES	1,352,464	152,824	1,505,288
Fuel	543,874		543,874
Purchased Power	386,872		386,872
Production	70,077		70,077
Transmission	10,378		10,378
Distribution	24,948		24,948
Customer Accounts	11,929		11,929
Allowance for Uncoll. Accounts	1,361	153	1,514
Customer Service	7,270		7,270
Administration & General	75,786		75,786
Gen Excise Tax Rate Incr Adj	328		328
Operation and Maintenance	1,132,823	153	1,132,976
Depreciation & Amortization	78,763		78,763
Amortization of State ITC	(1,304)		(1,304)
Taxes Other Than Income	126,284	13,544	139,828
Interest on Customer Deposits	377		377
Income Taxes	(6,634)	54,134	47,500
TOTAL OPERATING EXPENSES	1,330,309	67,831	1,398,140
OPERATING INCOME	22,155	84,993	107,148
AVERAGE RATE BASE	1,202,733	(1,521)	1,201,212
RATE OF RETURN ON AVERAGE RATE BASE	1.84%		8.92%

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Hawaiian Electric Company, Inc. Update at Current Effective Rates Results of Operations HECO-WP-2301 DOCKET NO. 2006-0386 PAGE 1 OF 13

#### (\$ Thousands)

	Current Effective Rates	Additional Amount	8.92% Return on Average Rate Base
Electric Sales Revenue	1,404,092	96,553	1,500,645
Other Operating Revenue	3,378	767	4,145
Gain on Sale of Land	500		500
TOTAL OPERATING REVENUES	1,407,970	97,320	1,505,290
Fuel	543,874		543,874
Purchased Power	386,872		386,872
Production	70,077		70,077
Transmission	10,378		10,378
Distribution	24,948		24,948
Customer Accounts	11,929		11,929
Allowance for Uncoll. Accounts	1,417	97	1,514
Customer Service	7,270		7,270
Administration & General	75,786		75,786
Gen Excise Tax Rate Incr Adj	328		328
Operation and Maintenance	1,132,879	97	1,132,976
Depreciation & Amortization	78,763		78,763
Amortization of State ITC	(1,304)		(1,304)
Taxes Other Than Income	131,209	8,619	139,828
Interest on Customer Deposits	377		377
Income Taxes	13,026	34,475	47,501
TOTAL OPERATING EXPENSES	1,354,950	43,191	1,398,141
OPERATING INCOME	53,020	54,129	107,149
AVERAGE RATE BASE	1,202,180	(968)	1,201,212
RATE OF RETURN ON AVERAGE			
RATE BASE	4.41%		8.92%

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Hawaiian Electric Company, Inc.

HECO-WP-2301 DOCKET NO. 2006-0386 PAGE 2 OF 13

Update at Current Effective Rates
COMPOSITE EMBEDDED COST OF CAPITAL
Estimated Average

A B C D

Capitalization Weighted Earnings Amount Percent of Reamts in Earnings Thousands Total Reqmts  $(B) \times (C)$ 5.00% Short-Term Debt 38,971 3.08 0.154% 2.314% Long-Term Debt 480,727 38.01 6.09% 7.47% 0.163% Hybrid Securities 27,556 2.18 0.090% Preferred Stock 20,586 1.63 5.51% 6.199% Common Equity 696,826 55.10 11.25% Total 1,264,666 100.00 Estimated Composite Cost of Capital 8.920% 8.92% or



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# Update at Current Effective Rates AVERAGE RATE BASE (\$ Thousands)

HECO-WP-2301 DOCKET NO. 2006-0386 PAGE 3 OF 13

Beginning Balance	End of Year Balance	Average Balance
1,331,363	1,370,649	1,351,006
517	3,567	2,042
53,084	53,084	53,084
12,838	12,838	12,838
49,429	51,405	50,417
68,260	50,549	59,405
0	0	0
0	4,642	2,321
0	0	0
27	26	27
1,515,518	1,546,760	1,531,140
164,092	176,802	170,447
1,001	756	879
6,369	6,827	6,598
152,438	139,685	146,062
28,523	30,065	29,294
1,582	1,214	1,398
354,005	355,349	354,678
		1,176,462
e Rates		25,718
ates		1,202,180
sh	~	(968)
		1,201,212
	1,331,363 517 53,084 12,838 49,429 68,260 0 0 27 1,515,518 164,092 1,001 6,369 152,438 28,523 1,582	Beginning Year Balance  1,331,363

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Update at Current Effective Rates
WORKING CASH ITEMS

HECO-WP-2301 DOCKET NO. 2006-0386 PAGE 4 OF 13

	Α	В	C NET	D
	COLLECTION LAG (DAYS)	PAYMENT LAG (DAYS)	COLLECTION LAG (DAYS) (A - B)	ANNUAL AMOUNT
ITEMS REQUIRING WORKING CASH				
Fuel Oil Purchases	37	17	20	537,767
O&M Labor	37	11	26	89,202
Purchased Power	37	· 39	(2)	386,872
ITEMS THAT PROVIDE WORKING CAS	Н			
O&M Nonlabor	37	32	5	118,932
Pension Asset Amortization	37	0	37	5,055
Revenue Taxes	37	66	(29)	124,843
Income Taxes-Present Rates	37	40	(3)	24,900
Income Taxes-Proposed Rates	37	40	(3)	59,375
	E	F WORKING	G	H WORKING
	AVERAGE	CASH	AVERAGE	CASH
	DAILY	(PRESENT	DAILY	(PROPOSED
	AMOUNT	RATES)	AMOUNT	RATES)
	(D/365)	(C X E)	(PROPOSED)	(C X G)
ITEMS REQUIRING WORKING CASH				
Fuel Oil Purchases	1,473	29,467	1,473	29,467
O&M Labor	244	6,354	244	6,354
Purchased Power	1,060	(2,120)	1,060	(2,120)
ITEMS THAT PROVIDE WORKING CAS	Н			
O&M Nonlabor	326	1,629	326	1,629
Pension Asset Amortization	14	512	14	512
Revenue Taxes	342	(9,919)	366	(10,604)
Income Taxes-Present Rates	68	(205)		
Income Taxes-Proposed Rates	163	-	163	(488)
Total	_	25,718	-	24,750
Change in Working Cash				(968)

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#### Hawaiian Electric Company, Inc.

# Update at Current Effective Rates COMPUTATION OF INCOME TAX EXPENSE

#### (\$ Thousands)

	Current Effective Rates	Adjustment	At Proposed Rates
Operating Revenues	1,407,970	97,320	1,505,290
Operating Expenses: Fuel Oil and Purchased Power Other Operation & Maintenance	930,746		930,746
Expense Depreciation	202,133 78,763	97	202,230 78,763
Amortization of State ITC Taxes Other than Income	(1,304) 131,209	8,619	(1,304) 139,828
Interest on Customer Deposits - Total Operating Expenses	1,341,924	8,716	1,350,640
Operating Income Before Income Taxes	66,046	88,604	154,650
Tax Adjustments: Interest Expense Meals and Entertainment	(30,597)		(30,597) 81
_	(30,516)	0	(30,516)
Taxable Income at Ordinary Rates	35,530	88,604	124,134
Income Tax Exp at Ordinary Rates	13,825	34,476	48,301
Tax Benefit of Domestic Production Activities Deduction Tax Effect of Deductible Preferred	776		776
Stock Dividends	23		23
TOTAL INCOME TAX EXPENSE	13,026	34,476	47,502

DPAD is not applicable to current effective rates; however, it is shown I to facilitate the proper calculation of revenue requirements.

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# Hawaiian Electric Company, Inc.

# Update at Current Effective Rates COMPUTATION OF TAXES OTHER THAN INCOME TAX

	Rate	At Curr Eff Rates	Adjustment	At Proposed Rates
Electric Sales Revenue Other Operating Revenue		1,404,092 3,378	96,553 767	1,500,645
Operating Revenues		1,407,470	97,320	1,504,790
Public Service Tax PUC Fees Franchise Tax Payroll Tax	5.885% 0.500% 2.500%	82,746 7,030 35,067 6,366	5,722 486 2,411	88,468 7,516 37,478 6,366
TOTAL TAXES OTHER THAN INC	COME TAX	131,209	8,619	139,828

Update at Current Effective Rates

CALCULATIONS OF REVENUE REQUIREMENTS

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OPERATING INCOME AT CURRENT EFFECTIVE RATES:	
Operating Revenues	1,407,970
Fuel and Purchased Power Expenses	930,746
Other O&M Expenses	202,133
Depreciation & Amortization Expense	78,763
Amortization of State ITC	(1,304)
Taxes Other than Income	131,209
Interest on Customer Deposits	377
Income Taxes	13,026
Total Operating Expenses	1,354,950
OPERATING INCOME AT CURRENT EFFECTIVE RATES	53,020
CALCULATIONS OF REVENUE REQUIREMENTS: OPERATING INCOME	
Rate Base at Proposed Rates	1,201,212
Proposed Rate of Return on Rate Base x	8.92%
Operating Income	107,148
Less: Operating Income at Current Effective Rate:	53,020
INCREASE IN OPERATING INCOME	54,128
OPERATING REVENUES:	
Increase in Operating Income	54,128
Operating Income Divisor (divided by)	0.55619
INCREASE IN OPERATING REVENUES	97,320
Increase in Electric Sales Revenue	96,553
Other Operating Revenue Rate x	0.794%
Increase in Other Operating Revenues	767
	97,320

Update at Current Effective Rates

CALCULATIONS OF REVENUE REQUIREMENTS

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BAD DEBT:		
Increase in Electric Revenues		96,553
Bad Debt Rate	х	0.0010
INCREASE IN BAD DEBT EXPENSE		97
REVENUE TAX:		
Increase in Operating Revenues	1	97,320
Less: Increase in Bad Debt Expense		(97)
		97,223
PSC Tax & PUC Fees Rate	x	6.385%
		6,208
Increase in Electric Revenues		96,553
Less: Increase in Bad Debt Expense		(97)
	•	96,456
Franchise Tax Rate	x	2.500%
		2,411
INCREASE IN REVENUE TAX		8,619
INCOME TAX:		
Increase in Operating Revenues Effective Income Tax Rate after considering		97,320
revenue tax & bad debt	x	35.425%
INCREASE IN INCOME TAX		34,475
INCREASE IN OPERATING INCOME (check)		54,129

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Update at Current Effective Rates CALCULATIONS OF REVENUE REQUIREMENTS

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(\$ Thousands)

CHANGE IN RATE BASE:

-	A EXPENSE AMOUNT	B AVERAGE DAILY AMOUNT (A/365)	C NET COLLECTION LAG (DAYS)	D WORKING CASH REQMT (B) x (C)
Increase in Revenue Tax	8,619	24	(29)	(685)
Income Tax at present rates	24,900	68	(3)	205
Income Tax at proposed rate	59,375	163	(3)	(488)
CHANGE IN RATE BASE - WORKING	G CASH			(968)
Rate Base at Present Rates			_	1,202,180
PROPOSED RATE BASE			_	1,201,212
Operating Income at Present	Rates			53,020
Increase in Operating Income			_	54,128
OPERATING INCOME AT PROPOSED	RATES		_	107,148
PROPOSED RATE OF RETURN ON R.	ATE BASE (ch	eck)	_	8.92%

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Hawaiian Electric Company, Inc.

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OPERATING REVENUES:	
Electric Sales Revenues	1,404,092
Other Operating Revenues	3,378
Gain on Sale of Land	500
TOTAL OPERATING REVENUES	1,407,970
FUEL OIL AND PURCHASE POWER EXPENSES:	
Fuel Oil Expense	537,767
Fuel Related Non-labor Exp	5,207
Fuel Handling Labor Expense	900
Fuel Oil Expense	543,874
Purchased Power Expense	386,872
TOTAL FUEL OIL AND PURCHASE POWER EXPENSES	930,746
OTHER OPERATION & MAINTENANCE EXPENSES:	
Production	70,077
Transmission	10,378
Distribution	24,948
Customer Account	11,929
Allowance for Uncollectible Accounts	1,417
Customer Service	7,270
Administration & General	75,786
Gen Excise Tax Rate Incr Adj	328
TOTAL OTHER OPERATION & MAINTENANCE EXPENSES	202,133

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Hawaiian Electric Company, Inc.

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TOTAL FUEL OIL & PP AND OTH O&M EXPENSES (LABOR/NON	JLABOR)
Fuel Oil Expense	537,767
Purchase Power Expense	386,872
Total Labor Expense	
Labor Expense	89,202
Total Labor Expense	89,202
Total Nonlabor Expense	
Nonlabor Expense	113,831
Fuel Related Expense	5,207
Payroll Taxes	6,366
Bad Debt Expense	(1,417)
Pension Asset Amortization	(5,055)
	118,932
TOTAL FUEL OIL & PP, OTH O&M AND PR TAX EXPENSES	1,132,773
REVENUE TAX Public Service Tax Electric Sales Revenues Other Operating Revenues	1,404,092 3,378
Less: Bad Debt Expense	(1,417)
Operating Revenues subject to PSC Tax	1,406,053
Public Service Tax Rate x	5.885%
Total PSC Tax	82,746
PUC Fees	•
Electric Sales Revenues	1,404,092
Other Operating Revenues	3,378
Less: Bad Debt Expense	(1,417)
Operating Revenues subject to PSC Tax	1,406,053
PUC Tax Rate x	0.500%
Total PUC Tax	7,030

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Hawaiian Electric Company, Inc.

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Franchise Tax	
Electric Sales Revenues	1,404,092
Less: Bad Debt Expense	(1,417)
	1,402,675
Franchise Tax Rate x	2.500%
Total Franchise Tax	35,067
TOTAL REVENUE TAX	124,843
INTEREST EXPENSE:	-
Interest Charged to Operations	33,275
AFUDC Debt	(2,678)
TOTAL INTEREST EXPENSE	30,597
INCOME TAX EXPENSE SUMMARY	
Current	24,900
Deferred	(12,753)
State ITC	2,846
Pension Asset Amortization	(1,967)
TOTAL INCOME TAX EXPENSE	13,026
CALCULATIONS OF REVENUE TAX RATE:	
Franchise Tax Rate adjusted for Change in Oth Oper	
Revenues and Bad Debt	0.02478
PSC Tax Rate adjusted for Bad Debt	0.05879
PUC Tax Rate adjusted for Bad Debt	0.00499
REVENUE TAX RATE	0.08856
CALCULATIONS OF COMPOSITE INCOME TAX RATE:	
State Tax Rate	0.06015
Federal Tax Rate	0.35000
rederar ray have	0.33000
State Tax Rate	0.06015
Federal Tax Rate x	0.35000
Federal Tax Effect on State Tax	(0.02105)
COMPOSITE INCOME TAX RATE	0.38910

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Hawaiian Electric Company, Inc.

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CALCULATIONS OF COMPOSITE CAPITAL GAINS TAX RATE: State Capital Gains Tax Rate Federal Tax Rate	0.03759 0.35000
State Capital Gains Tax Rate	0.03759
Federal Tax Rate x	0.35000
Federal Tax Effect on State Capital Gains Tax Rate	(0.01316)
COMPOSITE CAPITAL GAINS TAX RATE	0.37444
CALCULATIONS OF EFFECTIVE INCOME TAX RATE: PSC Tax & PUC Fees Rates adjusted for Bad Debt Franchise Tax adjusted for Change in Oth Oper Rev	0.06379
and Bad Debt	0.02478
Bad Debt Rate adjusted for Change in Oth Oper Rev	0.00100
Revenue Tax and Bad Debt rate	0.08956
Rev Tax & Bad Debt Reciprocal (1 - 0.08956) Composite Income Tax Rate x	0.91044 0.38910
EFFECTIVE INCOME TAX RATE AFTER CONSIDERING REVENUE TAX & BAD DEBT	0.35425
CALCULATIONS OF OPERATING INCOME DIVISOR:	0.06370
PSC Tax & PUC Fees Rates	0.06379 0.02478
Franchise Tax adjusted for Change in Oth Oper Rev Bad Debt Rate adjusted for Change in Oth Oper Rev	0.02478
Effective Income Tax Rate after considering	0.00100
revenue tax & bad debt	0.35425
	0.44381
OPERATING INCOME DIVISOR (1 - 0.44381)	0.55619

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Hawaiian Electric Company, Inc.
Update
Results of Operations

HECO-WP-2302 DOCKET NO. 2006-0386 PAGE 1 OF 13

(\$ Thousands)

	Present Rates	Additional Amount	Return on Average Rate Base
Electric Sales Revenue	1,348,635	152,004	1,500,639
Other Operating Revenue	3,329	820	4,149
Gain on Sale of Land	500		500
TOTAL OPERATING REVENUES	1,352,464	152,824	1,505,288
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Customer Accounts	11,929		11,929
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OPERATING INCOME	22,155	84,993	107,148
AVERAGE RATE BASE	1,202,733	(1,521)	1,201,212
RATE OF RETURN ON AVERAGE			
RATE BASE	1.84%		8.92%

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Hawaiian Electric Company, Inc.

HECO-WP-2302 **DOCKET NO. 2006-0386** PAGE 2 OF 13

# Update COMPOSITE EMBEDDED COST OF CAPITAL

Estimated Average

Α В С D Capitalization

	Amount in Thousands	Percent of Total	Earnings Reqmts	Weighted Earnings Reqmts (B) x (C)
Short-Term Debt	38,971	3.08	5.00%	0.154%
Long-Term Debt	480,727	38.01	6.09%	2.314%
Hybrid Securities	27,556	2.18	7.47%	0.163%
Preferred Stock	20,586	1.63	5.51%	0.090%
Common Equity	696,826	55.10	11.25%	6.199%
Total	1,264,666	100.00		
Estimated Composite	Cost of Capit	al		8.920%
			or	8.92%



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# Update AVERAGE RATE BASE (\$ Thousands)

HECO-WP-2302 DOCKET NO. 2006-0386 PAGE 3 OF 13

	Beginning	End of Year	Average
	Balance	Balance	Balance
Investments in Assets Serving Customers			
Net Cost of Plant in Service Property Held for Future Use Fuel Inventory Materials & Supplies Inventories Unamort. Net SFAS 109 Reg. Asset Pension Asset OPEB Amount Unamort Sys Dev Costs Unamort DSG Reg Asset ARO Reg Asset	1,331,363 517 53,084 12,838 49,429 68,260 0 0	1,370,649 3,567 53,084 12,838 51,405 50,549 0 4,642 0	1,351,006 2,042 53,084 12,838 50,417 59,405 0 2,321 0
Total Investments in Assets	1,515,518	1,546,760	1,531,140
Funds From Non-Investors			
Unamortized CIAC Customer Advances Customer Deposits Accumulated Def. Income Taxes Unamort State ITC (Gross) Unamortized Gain on Sale Total Deductions	164,092 1,001 6,369 152,438 28,523 1,582 354,005	176,802 756 6,827 139,685 30,065 1,214 355,349	170,447 879 6,598 146,062 29,294 1,398
Difference			1,176,462
Working Cash at Present Rates		_	26,271
Rate Base at Present Rates			1,202,733
Change in Rate Base - Working Cas	h	_	(1,521)
Rate Base at Proposed Rates		_	1,201,212

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Update WORKING CASH ITEMS

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	A	В	C	D
	COLLECTION	PAYMENT	NET COLLECTION	
	LAG	LAG	LAG	ANNUAL
	(DAYS)	(DAYS)	(DAYS)	AMOUNT
	(Bills)	(BIII 5)	(A - B)	11100111
ITEMS REQUIRING WORKING CASH				
Fuel Oil Purchases	37	17	20	537,767
0&M Labor	37	11	26	89,202
Purchased Power	37	39	(2)	386,872
ITEMS THAT PROVIDE WORKING CAS	H			
O&M Nonlabor	37	32	5	118,932
Pension Asset Amortization	37	0	37	5,055
Revenue Taxes	37	66	(29)	119,918
Income Taxes-Present Rates	37	40	(3)	5,240
Income Taxes-Proposed Rates	37	40	(3)	59,374
	E	F	G	Н
		WORKING		WORKING
	AVERAGE	CASH	AVERAGE	CASH
	DAILY	(PRESENT	DAILY	(PROPOSED
	AMOUNT	RATES)	AMOUNT	RATES)
	(D/365)	(C X E)	(PROPOSED)	(C X G)
ITEMS REQUIRING WORKING CASH				
Fuel Oil Purchases	1,473	29,467	1,473	29,467
0&M Labor	244	6,354	244	6,354
Purchased Power	1,060	(2,120)	1,060	(2,120)
ITEMS THAT PROVIDE WORKING CAS	Н			
O&M Nonlabor	326	1,629	326	1,629
Pension Asset Amortization	14	512	14	512
Revenue Taxes	329	(9,528)	366	(10,604)
Income Taxes-Present Rates	14	(43)		
Income Taxes-Proposed Rates	163	<u>-</u>	163	(488)
Total	_	26,271	_	24,750
Change in Working Cash				(1,521)

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#### Hawaiian Electric Company, Inc.

# Update COMPUTATION OF INCOME TAX EXPENSE

#### (\$ Thousands)

<u>-</u>	Present Rates	Adjustment	At Proposed Rates
Operating Revenues	1,352,464	152,824	1,505,288
Operating Expenses: Fuel Oil and Purchased Power Other Operation & Maintenance	930,746		930,746
Expense	202,077	153	202,230
Depreciation	78,763		78,763
Amortization of State ITC	(1,304)		(1,304)
Taxes Other than Income	126,284	13,544	139,828
Interest on Customer Deposits	377		377
Total Operating Expenses	1,336,943	13,697	1,350,640
Operating Income Before Income Taxes	15,521	139,127	154,648
Tax Adjustments: Interest Expense Meals and Entertainment	(30,597) 81		(30,597) 81
_	(30,516)	0	(30,516)
Taxable Income at Ordinary Rates	(14,995)	139,127	124,132
Income Tax Exp at Ordinary Rates	(5,835)	54,134	48,299
Tax Benefit of Domestic' Production Activities Deduction Tax Effect of Deductible Preferred	776		776
Stock Dividends	23		23
TOTAL INCOME TAX EXPENSE	(6,634)	54,134	47,500
	<del></del>		

DPAD is not applicable to present rates; however, it is shown here to facilitate the proper calculation of revenue requirements.

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Hawaiian Electric Company, Inc.

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# Update COMPUTATION OF TAXES OTHER THAN INCOME TAX

	Rate	At Present Rates	Adjustment	At Proposed Rates
Electric Sales Revenue Other Operating Revenue		1,348,635 3,329	152,004 820	1,500,639 4,149
Operating Revenues		1,351,964	152,824	1,504,788
Public Service Tax PUC Fees Franchise Tax Payroll Tax	5.885% 0.500% 2.500%	79,483 6,753 33,682 6,366	8,985 763 3,796	88,468 7,516 37,478 6,366
TOTAL TAXES OTHER THAN INC	COME TAX	126,284	13,544	139,828

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Update CALCULATIONS OF REVENUE REQUIREMENTS

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OPERATING INCOME AT PRESENT RATES:	
Operating Revenues	1,352,464
Fuel and Purchased Power Expenses	930,746
Other O&M Expenses	202,077 78,763
Depreciation & Amortization Expense Amortization of State ITC	(1,304)
Taxes Other than Income	126,284
Interest on Customer Deposits	377
Income Taxes	(6,634)
Total Operating Expenses	1,330,309
OPERATING INCOME AT PRESENT RATES	22,155
CALCULATIONS OF REVENUE REQUIREMENTS: OPERATING INCOME	
Rate Base at Proposed Rates	1,201,212
Proposed Rate of Return on Rate Base x	8.92%
Operating Income	107,148
Less: Operating Income at Present Rates	22,155
INCREASE IN OPERATING INCOME	84,993
OPERATING REVENUES:	
Increase in Operating Income	84,993
Operating Income Divisor (divided by)	0.55615
INCREASE IN OPERATING REVENUES	152,824
Increase in Electric Sales Revenue	152,004
Other Operating Revenue Rate x	0.539%
Increase in Other Operating Revenues	820
	152,824

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# Update CALCULATIONS OF REVENUE REQUIREMENTS

BAD DEBT:		
Increase in Electric Revenues		152,004
Bad Debt Rate	× _	0.0010
INCREASE IN BAD DEBT EXPENSE		153
REVENUE TAX:		
Increase in Operating Revenues		152,824
Less: Increase in Bad Debt Expense		(153)
		152,671
PSC Tax & PUC Fees Rate	x	6.385%
		9,748
Increase in Electric Revenues		152,004
Less: Increase in Bad Debt Expense		(153)
		151,851
Franchise Tax Rate	x	2.500%
		3,796
INCREASE IN REVENUE TAX	_	13,544
INCOME TAX:		
Increase in Operating Revenues Effective Income Tax Rate after considering		152,824
revenue tax & bad debt	x	35.422%
INCREASE IN INCOME TAX		54,134
INCREASE IN OPERATING INCOME (check)		84,993

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Update CALCULATIONS OF REVENUE REQUIREMENTS

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(\$ Thousands)

CHANGE IN RATE BASE:

	A	B AVERAGE DAILY	C NET	D WORKING CASH
	EXPENSE AMOUNT	AMOUNT (A/365)	COLLECTION LAG (DAYS)	REQMT (B)×(C)
<del></del>	,			
Increase in Revenue Tax	13,544	37	(29)	(1,076)
Income Tax at present rates	5,240	14	(3)	43
Income Tax at proposed rate	59,374	163	(3)	(488)
CHANGE IN RATE BASE - WORKING	G CASH			(1,521)
Rate Base at Present Rates			_	1,202,733
PROPOSED RATE BASE			_	1,201,212
Operating Income at Present I	Rates			22,155
Increase in Operating Income			~	84,993
OPERATING INCOME AT PROPOSED	RATES			107,148
PROPOSED RATE OF RETURN ON RA	ATE BASE (ch	ieck)	-	8.92%

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Hawaiian Electric Company, Inc.

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OPERATING REVENUES:	
Electric Sales Revenues	1,348,635
Other Operating Revenues	3,329
Gain on Sale of Land	500
TOTAL OPERATING REVENUES	1,352,464
FUEL OIL AND PURCHASE POWER EXPENSES:	
Fuel Oil Expense	537,767
Fuel Related Non-labor Exp	5,207
Fuel Handling Labor Expense	900
Fuel Oil Expense	543,874
Purchased Power Expense	386,872
TOTAL FUEL OIL AND PURCHASE POWER EXPENSES	930,746
OTHER OPERATION & MAINTENANCE EXPENSES:	
Production	70,077
Transmission	10,378
Distribution	24,948
Customer Account	11,929
Allowance for Uncollectible Accounts	1,361
Customer Service	7,270
Administration & General	75,786
Gen Excise Tax Rate Incr Adj	328
TOTAL OTHER OPERATION & MAINTENANCE EXPENSES	202,077

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# Hawaiian Electric Company, Inc.

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TOTAL FUEL OIL & PP AND OTH O&M EXPENSES (LABOR/NOM	ILABOR)
Fuel Oil Expense	537,767
Purchase Power Expense	386,872
Total Labor Expense	
Labor Expense	89,202
Total Labor Expense	89,202
Total Nonlabor Expense	112 775
Nonlabor Expense	113,775
Fuel Related Expense	5,207
Payroll Taxes	6,366
Bad Debt Expense	(1,361)
Pension Asset Amortization	(5,055)
	118,932
TOTAL FUEL OIL & PP, OTH O&M AND PR TAX EXPENSES	1,132,773
REVENUE TAX Public Service Tax Electric Sales Revenues Other Operating Revenues Less: Bad Debt Expense	1,348,635 3,329 (1,361)
Operating Revenues subject to PSC Tax	1,350,603
Public Service Tax Rate x	5.885%
Total PSC Tax	79,483
PUC Fees Electric Sales Revenues Other Operating Revenues Less: Bad Debt Expense	1,348,635 3,329 (1,361)
Operating Revenues subject to PSC Tax	1,350,603
PUC Tax Rate x	0.500%
Total PUC Tax	6,753

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Hawaiian Electric Company, Inc.

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Franchise Tax	
Electric Sales Revenues	1,348,635
Less: Bad Debt Expense	(1,361)
	1,347,274
Franchise Tax Rate x	2.500%
Total Franchise Tax	33,682
TOTAL REVENUE TAX	119,918
INTEREST EXPENSE:	
Interest Charged to Operations	33,275
AFUDC Debt	(2,678)
TOTAL INTEREST EXPENSE	30,597
INCOME TAX EXPENSE SUMMARY	
Current	5,240
Deferred	(12,753)
State ITC	2,846
Pension Asset Amortization	(1,967)
TOTAL INCOME TAX EXPENSE	(6,634)
CALCULATIONS OF REVENUE TAX RATE:	
Franchise Tax Rate adjusted for Change in Oth Oper	
Revenues and Bad Debt	0.02484
PSC Tax Rate adjusted for Bad Debt	0.05879
PUC Tax Rate adjusted for Bad Debt	0.00499
REVENUE TAX RATE	0.08863
CALCULATIONS OF COMPOSITE INCOME TAX RATE:	
State Tax Rate	0.06015
Federal Tax Rate	0.35000
Chata May Daha	0 06015
State Tax Rate	0.06015
Federal Tax Rate x	0.35000
Federal Tax Effect on State Tax	(0.02105)
COMPOSITE INCOME TAX RATE	0.38910

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Hawaiian Electric Company, Inc.

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CALCULATIONS OF COMPOSITE CAPITAL GAINS TAX RATE:	
State Capital Gains Tax Rate	0.03759
Federal Tax Rate	0.35000
State Capital Gains Tax Rate	0.03759
Federal Tax Rate x	0.35000
Federal Tax Effect on State Capital Gains Tax Rat $\epsilon$	(0.01316)
COMPOSITE CAPITAL GAINS TAX RATE	0.37444
CALCULATIONS OF EFFECTIVE INCOME TAX RATE:	
PSC Tax & PUC Fees Rates adjusted for Bad Debt	0.06379
Franchise Tax adjusted for Change in Oth Oper Rev	
and Bad Debt	0.02484
Bad Debt Rate adjusted for Change in Oth Oper Rev	0.00100
Revenue Tax and Bad Debt rate	0.08963
Rev Tax & Bad Debt Reciprocal (1 - 0.08963)	0.91037
Composite Income Tax Rate x	0.38910
EFFECTIVE INCOME TAX RATE AFTER CONSIDERING	
REVENUE TAX & BAD DEBT	0.35422
CALCULATIONS OF OPERATING INCOME DIVISOR:	
PSC Tax & PUC Fees Rates	0.06379
Franchise Tax adjusted for Change in Oth Oper Rev	0.02484
Bad Debt Rate adjusted for Change in Oth Oper Rev	0.00100
Effective Income Tax Rate after considering	
revenue tax & bad debt	0.35422
	0.44385
OPERATING INCOME DIVISOR (1 - 0.44385)	0.55615
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